

RESPONSE

Pending claims

Claims 24-30 are pending. Claims 28-30 are cancelled herein without prejudice and claims 31-34 are added. Upon entry of this amendment and response, claims 24-27 and 31-34 are presented for examination. Support for the amendment may be found throughout the specification and in the claims as originally filed.

Drawings

The Examiner has requested a new set of formal drawings with identifying information placed on the front of each sheet and centered within the top margin. Applicants have complied with the requirement and submit herewith as a separate paper with a transmittal letter addressed to the Official Draftsperson, a new set of formal drawings.

Sequence Compliance

The Office Action indicates that the CRF filed on January 22, 2003 has been found acceptable and entered. The Examiner asserts that the Sequence Listing introduces new matter and has requested a new sequence listing. Applicant respectfully submits that the Examiner is in error and therefore has not provided a new sequence listing for reasons provided in the section below responding to the Examiner's new matter objection.

Objections to the Specification

The amendment filed January 22, 2003 directing entry of the sequence is objected to under 35 U.S.C. § 1.132. The Examiner asserts that SEQ ID NO: 4 does not appear in the

specification or Figures and is thus new matter added to the specification. Applicant respectfully submits that the objection is in error because SEQ ID NO. 4 is identical to SEQ ID NO. 4 as filed in the originally submitted Sequence Listing. The originally filed sequence listing was filed with the application on March 28, 2000 and thus is part of the specification as originally filed. Therefore, the Sequence Listing filed on January 22, 2003 does not introduce new matter by presenting the same SEQ ID NO: 4 filed with the original application. Accordingly, Applicants respectfully request that the objection be reconsidered and withdrawn.

Rejection of Claims 13-23 Under 35 U.S.C. § 103(a)

Claims 13-23 stand rejected under 35 U.S.C. § 103(a) as being obvious in view of Van Damme, et al., J. Exp. Med. 176: 59-65, 1992, (Van Damme) in view of Gong, et al., J. Biol. Chem. 271: 1051-10, 1996 ("Gong") and further in view of Van Coille, et al., Biochem. Biophys. Res. Com. 231: 726-730, 1997 ("Van Coille"). The Examiner asserts that Van Damme teaches purification and characterization of MCP-2 and that Gong teaches MCP-1 truncations and teaches "a broadly applicable method for identifying chemokine antagonists by progressively shortening the amino terminus of MCP-1." The Examiner cites Van Coille for the proposition that there are two alleles of MCP-2. The Examiner asserts that given teachings of Van Damme that "MCP-2 is a structural and functional analog equivalent of MCP-1, the ordinary artisan at the time the invention was made would have been motivated to apply the approach used by Gong, et al....to develop antagonistic amino terminal truncations of MCP-2."

The claims are additionally rejected over U.S. Patent No. 5,739,103 ("Rollins") in view of Van Damme and Van Coille. The Examiner acknowledges that Rollins does not teach the specific truncations claimed. The Examiner states that Van Damme teaches purification and

characterization of MCP-2 and that Van Coillie teaches two alleles of MCP-2. The Examiner asserts that the motivation to produce additional truncations is the motivation to optimize and screen the small genus of truncations taught by Rollins.

It is the Examiner's position that despite Gong's teachings of the variable effects of truncations it would be obvious *to try* to obtain additional truncations. The Examiner asserts that there would be motivation to evaluate the effect of such compounds with the expectation of inhibiting at least some models of inflammation. The Examiner provides no support for any belief that such truncations would inhibit any models of inflammation in view of Gong's teachings that RANTES polypeptides consisting of residues 6-68, i.e., the smallest truncation shown by Gong, showed the *least* displacement and therefore the *least* amount of inhibition in the assays used to evaluate efficacy. Further, the Examiner points to no teaching in Van Damme or Van Coille that would lead one of skill in the art to apply the teachings of Rollins to obtain the specific truncations claimed herein.

Therefore, contrary to the Examiner's assertion, one of skill in the art would *not* be motivated to make truncations with fewer than six amino acids to obtain an effective chemokine inhibitor. Additionally, "obvious-to-try" is an incorrect standard where the claimed result, the generation of compounds and pharmaceutical compositions *with chemokine antagonistic activity*, is not at all predictable. See, *In re Eli Lilly & Co.*, 902 F.2d 943, 14 USPQ2d 1741 (Fed. Cir. 1990).

The present invention relates to the discovery that potent chemokine inhibitors are generated under natural conditions. In particular, proteolytic cleavage of intact MCP-2 to a truncated form such as MCP-2 (6-76) converts this chemokine into a potent inhibitor of chemokine induced chemotaxis. Further, all of the cited documents report studies carried out on different chemokines and therefore do not permit generalization to MCP-2. In support of this,

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Amendment and Response to Office Action

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Applicants further direct the Examiner's attention to the article by Proost, et al., *The Journal of Immunology*, 4034-4041, 1998 (not prior art to the instant application), previously cited by the Examiner, demonstrating unexpected differences in the properties of certain MCP-1 and MCP-2 truncations.

CONCLUSION

Applicants submit that the claims are allowable and that the Application is now in condition for allowance. Applicants respectfully request early favorable action by the Examiner. If the Examiner believes that a telephone conversation with Applicants' attorney would expedite prosecution of this application, the Examiner is cordially invited to call the undersigned attorney of record.

Date: September 30, 2003

By: Dianne Rees

Dianne Rees, Ph.D. (Reg. No. 45,281)

EDWARDS & ANGELL, LLP

PO BOX 9169

Boston, Massachusetts 02209

(617) 951-4444

Customer No: 21,874



1644/B

Attorney Docket No.: 49673 CPA (72024)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS Proost, et al.

EXAMINER:

Roark, Jessica H.

U.S.S.N.: 09/537,859

GROUP:

1644

FILED: March 28, 2000

Conf. No.

5522

FOR: AMINO-TERMINALLY TRUNCATED MCP-2 AS CHEMOKINE
ANTAGONISTS

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on September 30, 2003.

By: Crystal Slason
Crystal Slason

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AMENDMENT TRANSMITTAL

1. Transmitted herewith is an Amendment and Response to the Non-Final Office Action mailed on March 31, 2003; and
2. Transmittal of Formal Drawings, including 3 Sheets of Formal Drawings (Figs. 1, 2, 3, 4A and 4B), Copy of Office Action mailed on March 31, 2003, and A Copy of Draftperson's Patent Drawing Review.



Attorney Docket No. 49673 CPA (72024)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS Proost, et al.

EXAMINER: Roark, Jessica H.

U.S.S.N.: 09/537,859

GROUP: 1644

FILED: March 28, 2000

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FOR: AMINO-TERMINALLY TRUNCATED MCP-2 AS CHEMOKINE ANTAGONISTS

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By: Crystal Slason
Crystal Slason

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT

Sir/Madam:

In response to the Office action of March 31, 2003, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 4 of this paper.

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02 FC:1201 20.00 DA 64.00 DP